RQM 310
PRE/POST ASSESSMENT TOOLS

Defense Acquisition University

www.DAU.mil

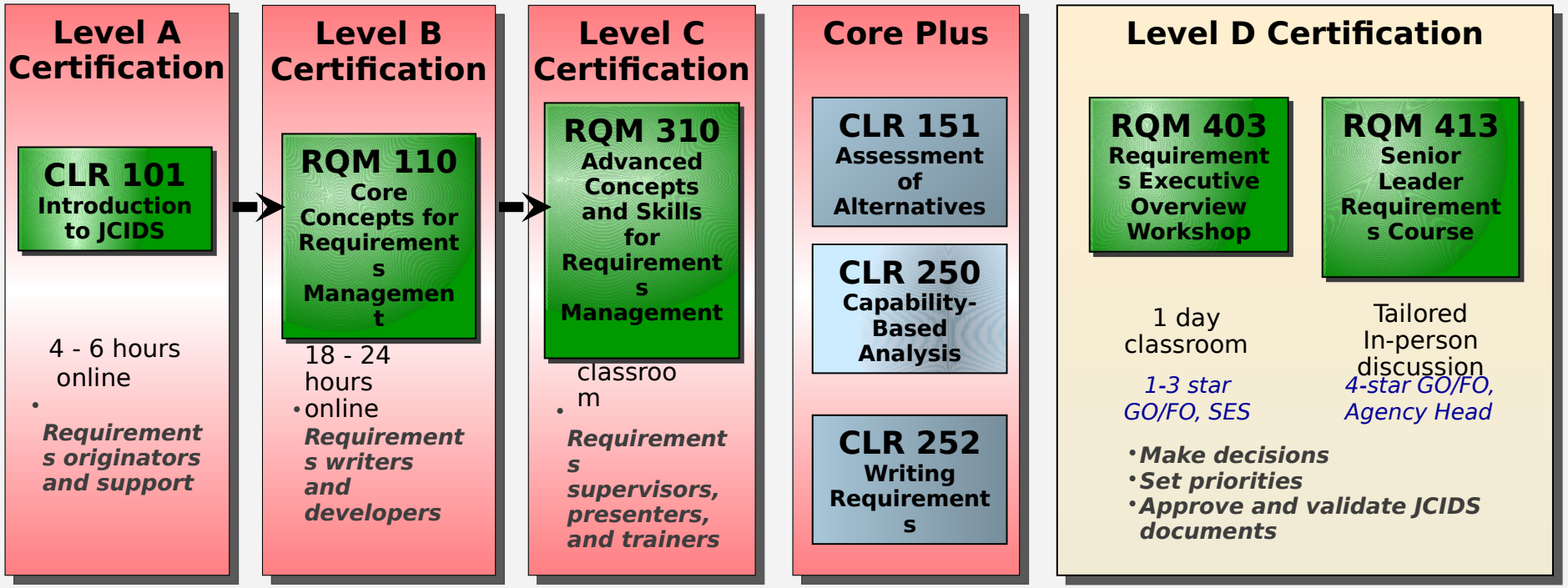
2007 NDAA

The National Defense Authorization Act (NDAA) of 2007 mandated the Under Secretary of Defense for Acquisition, Technology and Logistics (AT&L), in consultation with the Defense Acquisition University (DAU), to develop a training program to certify DoD personnel with the responsibility to generate capability requirements for major defense acquisition programs.

2007 NDAA

The congressional mandate called for training both military and DoD civilian managers charged with assessing, developing, validating, and prioritizing requirements through the JCIDS process. This broad definition covered relatively junior members of the workforce up to and including 4-star generals and admirals on the JROC who ultimately validate the requirements.

Requirements Management Training Curriculum (RMCT)



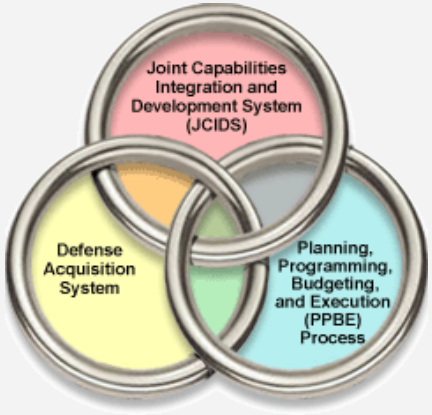
Mandatory for RM certification

Core Plus / Just-in-Time

Requirements Management Certification Training (RMCT) Levels

CLR 101 Introduction to JCIDS	RQM 110 Core Concepts for Requirements Management	RQM 310 Advanced Concepts and Skills	RQM 403 Requirements Executive Overview Workshop	RQM 413 Senior Leader Requirements Course
4 - 6 hours	24 - 30 hours	5 days	1 day	Tailored

A	**Contribute to the Requirements generation and capability development process in various capacities to include: JCIDS analysis, subject matter or domain expertise, document staffing and coordination and / or administrative support – *Requirements Originators and Support***
B	**Significantly involved with Requirements generation and capability development in specific capacities, i.e. study leadership, planning, writing, adjudicating comments, and facilitating inter-organizational development and coordination of Requirements documents – *Requirements Writers and Developers***
C	**Designated by organizational leadership for advanced Requirements instruction; Primary duties involve leadership / supervisory roles in requirements generation and capability development; Organizational representative in pertinent program management and JCIDS forums to include FCB Working Group, FCB, JCB and JROC meetings – *Requirements***


Joint Capabilities Integration and Development System (JCIDS)
Defense Acquisition System
Planning, Programming, Budgeting, and Execution (PPBE) Process

RQM 310 Class Content and Schedule

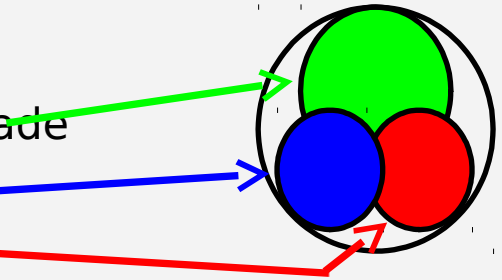
RQM 310 Daily Class Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00	Introduction and Orientation	AoA	Urgent Operational Needs	End of Course Examination	Capstone Exercise: FCB Briefing
8:30	Class Introductions and Teaming			External Influences - Guest Speaker	Outside Expert Evaluator
9:00		MDD to Milestone A	DOTmLPF-P		
9:30	Pre-Course Assessment				
10:00	RQM 110/ Jeopardy Review		Intel Support to Requirements	IT Documents Exercise	Guest Speaker - Expert Evaluator
10:30		PPBE			Capstone Exercise: FCB Staff
11:00	JCIDS and Acquisition		Milestone B to FOC	Prioritization Simulation	
11:30					Lunch
12:00	Lunch	Lunch	Lunch		
12:30				Lunch	Capstone Exercise: FCB Staff
13:00	Pre-MDD Analyses	Getting from AoA to KPPs	Test & Evaluation		*** Continuation***
13:30				DAU Knowledge Resources	
14:00	IS and IT Requirements Documents	KPP and KSA Development	CDDs	Capstone Introduction	
14:30	ICD Review		Writing Requirements	Capstone Briefing Preparation	Course Wrap-up
15:00			JCIDS Simulation		Examination Retest
15:30	ICD Review Exercise	Milestone A to Milestone B			
16:00			SIM Debrief		
16:30			Test Questions	Examination Results	
17:00					

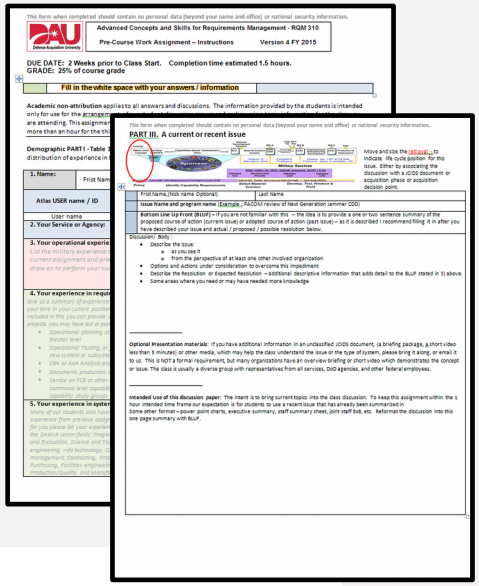
RQM 310 Assessment Strategy

RQM 310 employs a holistic approach to student assessments to include testing, in-class participation, and homework (which is due before the beginning of class week)

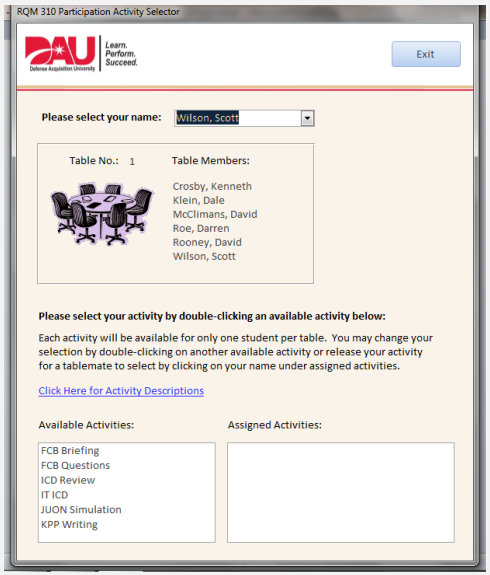
- Testing, while an important part of student assessments, are weighted with other activities
- Weighted values of class events follow:
  - In-Class 20 Question Exam: **50%** of grade
  - Pre-Class Homework: **25%** of grade
  - In-Class Participation: **25%** of grade



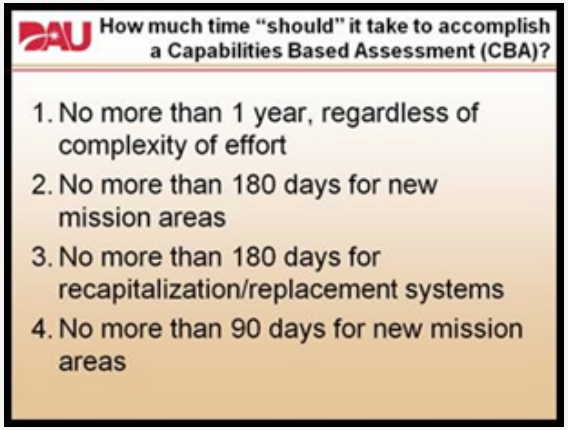
HOMEWORK


Advanced Concepts and Skills for Requirements Management - RQM 310
Pre-Course Work Assignment – Instructions
Version 4 FY 2015
DUE DATE: 2 Weeks prior to Class Start. Completion time estimated 1.5 hours.
GRADE: 25% of course grade
Fill in the white space with your answers / information
PART III. A current or recent issue

PARTICIPATION

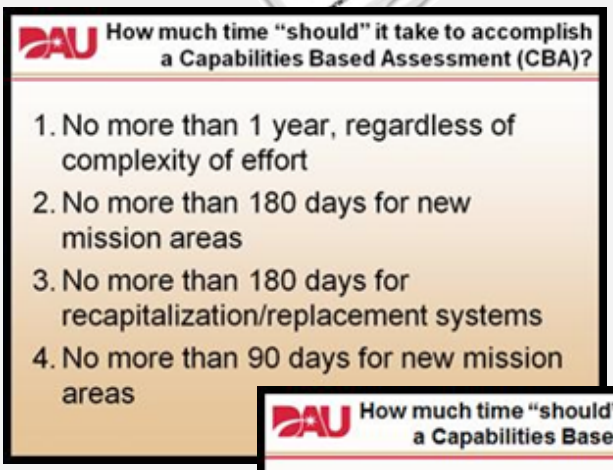

RQM 310 Participation Activity Selector
Learn. Perform. Succeed.
Exit
Please select your name:
Wilson, Scott
Table No.: 1
Table Members:
Crosby, Kenneth
Klein, Dale
McClimans, David
Roe, Darren
Rooney, David
Wilson, Scott
Please select your activity by double-clicking an available activity below:
Each activity will be available for only one student per table. You may change your selection by double-clicking on another available activity or release your activity for a tablemate to select by clicking on your name under assigned activities.
Click Here for Activity Descriptions
Available Activities:
Assigned Activities:
FCB Briefing
FCB Questions
ICD Review
IT ICD
JUON Simulation
KPP Writing

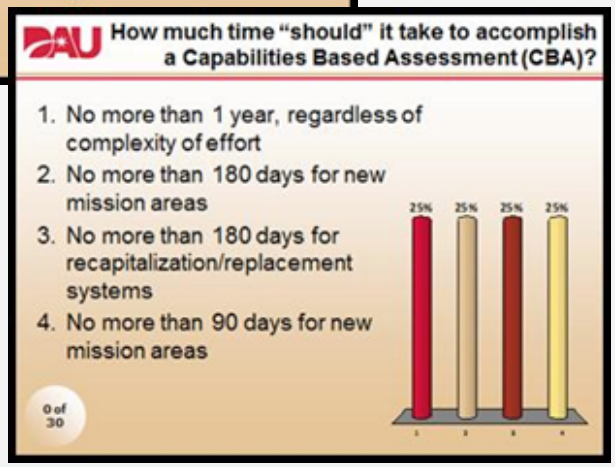
EXAM


How much time "should" it take to accomplish a Capabilities Based Assessment (CBA)?
1. No more than 1 year, regardless of complexity of effort
2. No more than 180 days for new mission areas
3. No more than 180 days for recapitalization/replacement systems
4. No more than 90 days for new mission areas

RQM 310 Pre/Post Testing Construct

Background: The RQM 310 course test consists of **20 questions** taken from the lecture material. All material being tested will have been instructed in the classroom during the lectures and will be directly traceable back to the Requirements Dept Competency Model and the course learning objectives


DAU
How much time "should" it take to accomplish a Capabilities Based Assessment (CBA)?
1. No more than 1 year, regardless of complexity of effort
2. No more than 180 days for new mission areas
3. No more than 180 days for recapitalization/replacement systems
4. No more than 90 days for new mission areas

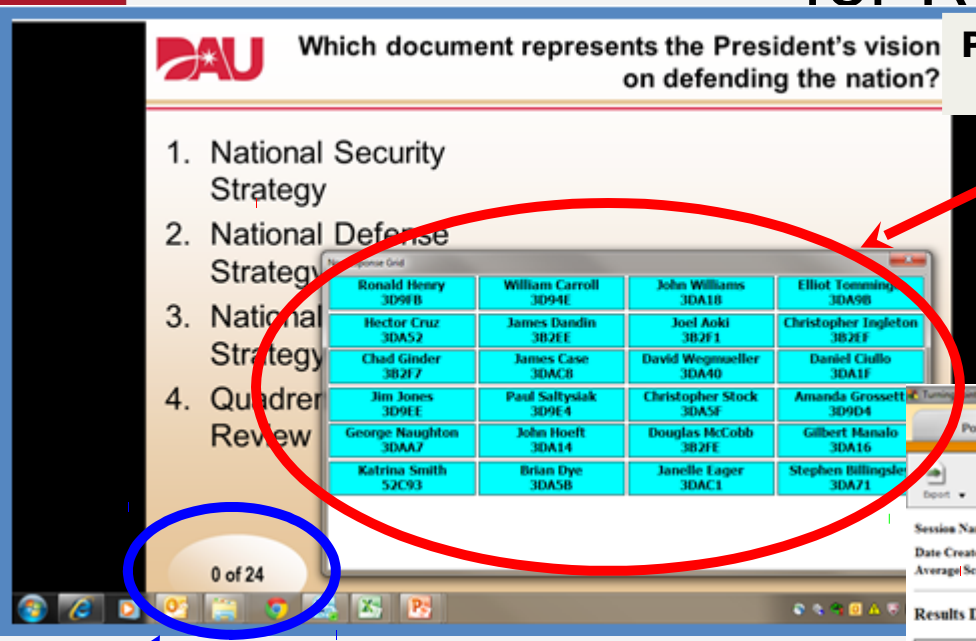

DAU
How much time "should" it take to accomplish a Capabilities Based Assessment (CBA)?
1. No more than 1 year, regardless of complexity of effort
2. No more than 180 days for new mission areas
3. No more than 180 days for recapitalization/replacement systems
4. No more than 90 days for new mission areas
25%
25%
25%
25%
0 of 30

Administration: The Assessment test is administered on Monday and on Thursday of class week using TurningPoint clickers. Each student will be assigned a specific clicker with a unique ID to support student identification.

The initial test, administered early Monday morning, will serve to baseline the student's incoming knowledge level. The Thursday morning assessment will be administered to assess student "mastery" per DAU directives.

Written copies of the test will be used for students who arrive late for either Monday's or Thursday's test.

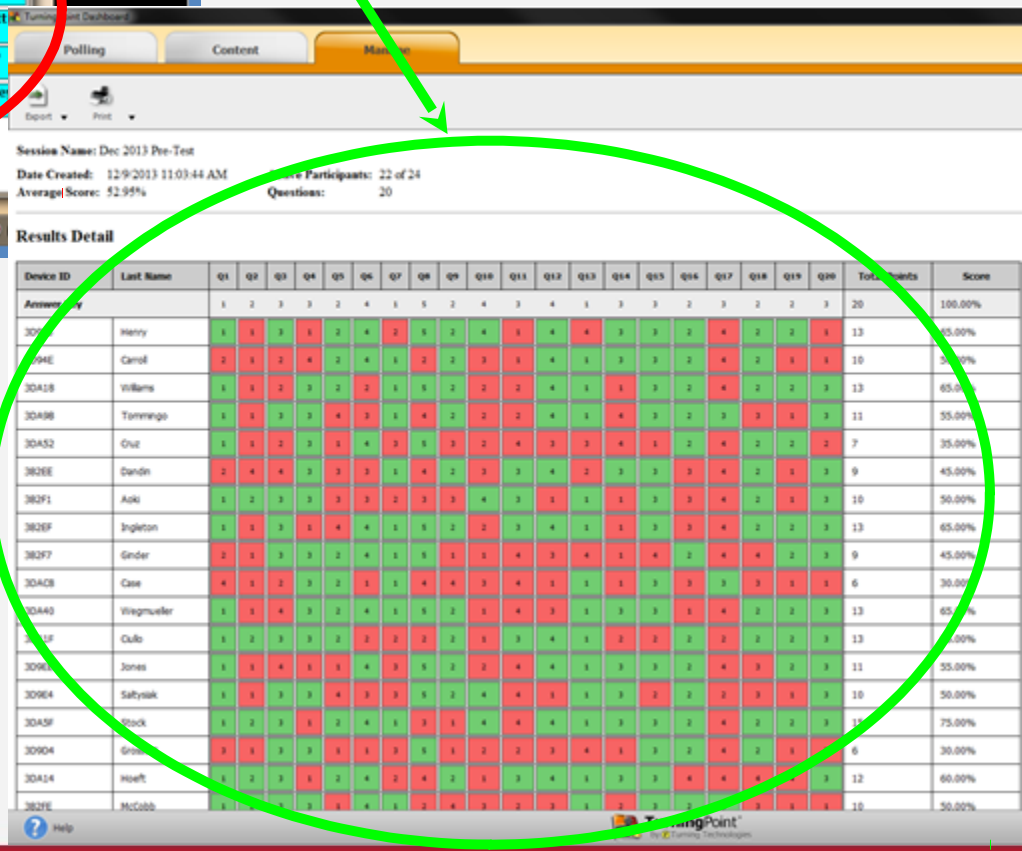
Using TurningPoint for ROM 310 Pre/Post Testing



Participant Response Indicator

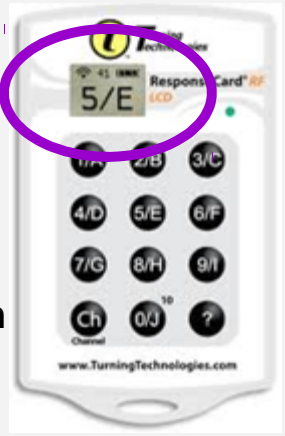
- **100% control of testing administration**
- **Testing admin & tabulation time reduced 50%**

Results Tabulation



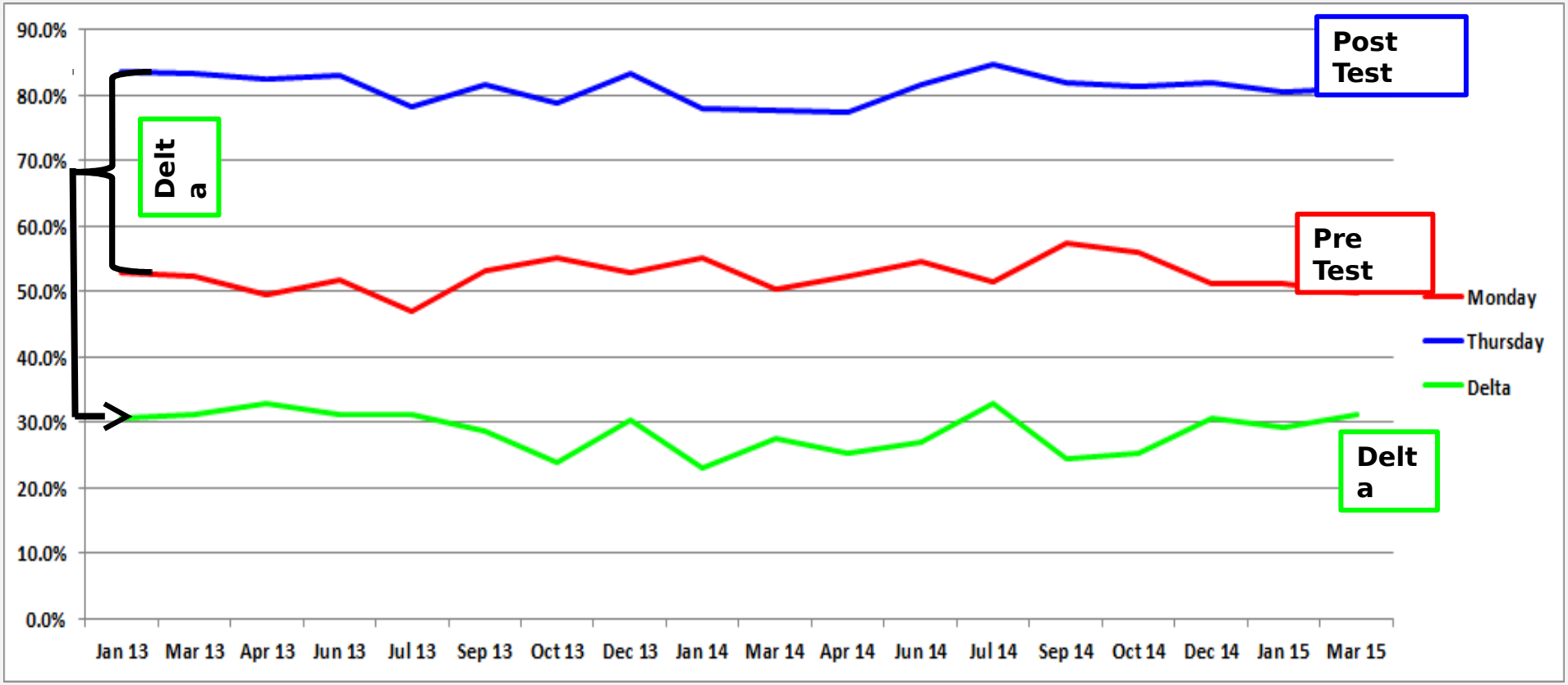
Response Counter

Student Answer Response Confirmation



Student Clicker

RQM 310 Pre/Post Testing Results To Date



Overall Averages: **Pre-Test: 52.5%**
Post-Test: 81.1%
Growth: 28.7%

rage knowledge growth over the RQM 310 course is 28.

FY13 – FY15 Post Testing Demographics Analysis

Time in Billet	Pre	Post	Growth
<1 Month	50.4%	76.1%	25.7%
1-6 Months	51.3%	81.3%	30.1%
6-12 Months	52.0%	80.9%	28.9%
12-24 Months	50.7%	79.6%	28.9%
>24 Months	54.3%	81.8%	27.4%

Total Experience	Pre	Post	Growth
<6 Month	49.6%	79.3%	29.7%
6-12 Months	51.2%	80.9%	29.7%
1-3 Years	51.1%	80.7%	29.6%
3-5 Years	56.0%	83.2%	27.2%
>5 Years	57.0%	81.2%	24.1%

Beltway	Pre	Post	Growth
Inside	52.1%	81.1%	29.0%
Outside	53.0%	80.8%	27.7%

- The earlier into their billet assignment that we get them into RQM 310 is directly related to their knowledge growth
- **Course is of value for all students, regardless of total experience**
- Joint Staff and OSD students perform the best
- **The greater the student assesses their percent of requirements work within their current job, the better they perform**

Organization	Pre	Post	Growth
Service HQ	51.5%	80.0%	28.5%
Major Command	53.6%	82.4%	28.9%
Joint Staff	55.1%	83.2%	28.0%
COCOM	48.9%	76.4%	27.5%
OSD	60.0%	87.5%	27.5%
Defense Agency	53.3%	82.1%	28.8%
Other	49.6%	78.5%	28.9%

	Pre	Post	Growth
100%	53.9%	82.7%	28.8%
75-99%	53.4%	81.3%	27.9%
50-74%	53.1%	81.3%	28.2%
25-49%	49.9%	79.4%	29.5%
0-24%	52.2%	79.4%	27.2%

RQM 310 Pre/Post Testing Results FY13 - FY15

#	Lesson	FY 13 Averages			FY 14 Averages			FY 15 Averages		
		Pre Avg	Post Avg	Δ	Pre Avg	Post Avg	Δ	Pre Avg	Post Avg	Δ
1	Pre-MDD Analysis	36.8	93.2	56.3	48.4	86.5	38.1	44.8	82.7	37.9
2	PPBE	8.9	47.7	38.8	31.3	49.8	18.4	36.3	71.2	35.0
3	AoA	48.7	83.9	35.2	45.0	84.7	39.7	31.8	84.0	52.2
4	KPP/KSA Develop	28.8	88.6	59.8	39.8	86.0	46.2	30.0	87.4	57.5
5	MS A to MS B	68.3	93.3	24.9	69.4	89.9	20.5	67.2	93.8	26.7
6	JCIDS & Acquisition	73.7	92.6	18.8	64.5	92.9	28.4	73.2	92.2	19.0
7	MS B to IOC	60.1	83.3	23.2	59.0	80.5	21.6	65.2	78.7	13.5
8	Pre-MDD Analysis	26.5	74.4	47.9	48.8	71.1	22.4	43.3	70.1	26.8
9	JUONs	52.6	90.1	37.5	63.7	87.2	23.4	50.7	90.3	39.6
10	CDDs	70.6	71.7	1.1	52.3	80.8	28.5	59.4	81.5	22.2
11	KPP/KSA Develop	69.3	94.3	25.0	73.0	96.1	23.2	80.8	96.9	16.2
12	MDD to MS A	43.1	86.0	42.9	41.5	86.6	45.1	31.3	87.5	56.2
13	PPBE	49.4	96.6	47.3	50.8	76.3	25.6	46.9	58.1	11.3
14	MS B to IOC	80.4	96.3	15.9	72.2	97.2	24.9	76.3	93.3	17.0
15	AoA	73.0	93.7	20.7	66.0	88.8	22.8	61.1	92.6	31.5
16	KPP/KSA Develop	68.8	85.5	16.7	65.5	85.1	19.6	67.9	77.0	9.1
17	JUONs	36.2	64.1	27.8	32.6	61.0	28.4	24.5	76.7	52.2
18	MDD to MS A	51.5	77.1	25.6	66.8	84.5	17.7	82.7	84.1	1.3
19	MS B to IOC	53.0	72.1	19.1	46.4	65.7	19.4	36.2	59.5	23.4
20	Pre-MDD Analysis	25.3	46.7	21.4	35.5	54.9	19.4	29.5	64.8	35.3

FY 13-15 Trend Data and Observations

- PPBE remains a weak area with inconsistent results
- Reworded question to focus learning point on Life Cycle Costs late in FY14
- Adjusted slide and emphasize instruction, showing continued improvement
- Fixed confusing wording on slides and on the test question along with more refined instruction…no longer an issue
- Reworded question to be more accurate, but

Summary

- **Pre/Post Testing gives us a way to measure student knowledge growth in the class**
- **The technology has been an invaluable tool in testing, exercises, and analysis**
- **The analysis disproved many of our pre-assumptions about our student population**
- **The analysis helps us adjust our course content and make changes to confusing test questions**